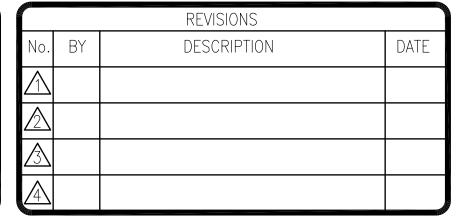
## 2. DESIGN LOADS 2.1. GRAVITY ROOF DESIGN LOADS: FLAT ROOF SNOW LOAD SILO DEAD LOADS SILO GRAIN LOADS GENERAL STRUCTURAL NOTES -IBC BUILDING CODE 2009 ED -ANSI-ASCE 7-05 -ACI 318-05 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" -ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" -AISC STEEL CONSTRUCTION MANUAL 9TH ED ASD -AISI COLD FORMED STEEL DESIGN MANUAL, 2001 -ANSI-AF\$PA NDS-2005 3. CONTRACTOR SHALL BRING TO THE ATTENTION OF THE ENGINEER ANY CONDITIONS DIFFERENT FROM THOSE SHOWN ON THE DRAWINGS AND ALSO ANY CONDITIONS THAT PREVENT THE CONTRACTOR'S COMPLETION OF THE WORK AS SHOWN ON THE CONSTRUCTION DRAWINGS. 4. ALL WORK SHALL BE PERFORMED BY PERSONS QUALIFIED IN THEIR TRADE AND LICENSED TO PRACTICE SUCH TRADE IN THE STATE IN WHICH THE PROJECT IS LOCATED. S. ALL DIMENSIONS, ELEVATIONS, AND CONDITIONS SHALL BE VERIFIED IN THE FIELD BY GENERAL CONTRACTOR (G.C.) AND ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK. 7. UNLESS OTHERWISE NOTED, DETAILS, SECTIONS, AND NOTES SHOWN ON ANY DRAWING SHALL BE CONSIDERED TYPICAL FOR ALL SIMILAR DETAILS. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF ALL APPLICABLE STATE AND LOCAL CODES, INCLUDING BUT NOT TED TO: HRE SUPPRESSION SYSTEM TO BE EXTENDED FROM EXISTING BOILER ROOM INTO NEW BOILER ROOM. SEE MECHANICAL SPECIFICATIONS FOR DESIGN BUILD REQUIEMENTS. HESE DRAWINGS DO NOT SHOW SIZE, LOCATION OR TYPE OF IPENING IN THE FOUNDATION SYSTEM FOR ELECTRICAL, LUMBING OR MECHANICAL EQUIPMENT. THE GENERAL ONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING THESE EMS. LATERAL - WIND: V=98MPH, EXP B, I=1.0, Kd=0.85, Kz=0.71, Kzt=1.0, Qh=15.0 PSF. LATERAL - SEISMIC: 5s=0.31, 51=0.078, SITE=D, Fa=1.52, Fv=2.4, Sds=0.314, 5d1=0.125, I=1.0, SDC=B, R= 3.0 ELEVATED TANK ON BRACED LEGS V=16K, R=3.5 ORD. STEEL MOMENT FRAMES SHOP DRAWINGS PROVIDED BY OTHERS SHALL BE BMITTED TO THE ENGINEER FOR REVIEW PRIOR TO BRICATION OF MATERIAL OR THE PURCHASE OF N-RETURNABLE STOCK. DIMENSIONAL REVIEW IS THE NTRACTOR'S RESPONSIBILITY. SE DRAWINGS SHALL BE USED IN CONJUNCTION WITH ANY HITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS, IN JITION TO SPECIFICATIONS AND ANY SHOP DRAWINGS WIDED BY SUBCONTRACTORS AND SUPPLIERS. 42 PSF BALANCED + DRIFT 18K 143K (FULL) LIGHT GAGE FRAMING 20 GAGE - WHITE 18 GAGE - YELLOW 16 GAGE - GREEN 14 GAGE - ORANGE 12 GAGE - RED ALL STUD WALLS SHALL HAVE HORIZONTAL BRIDGING AND CROSS BRACING INSTALLED AS SHOWN ON THE DRAWINGS. ALL BRACING SHALL BE INSTALLED BEFORE APPLICATION OF LOADS. STRUCTURAL STUD AND TRACK COMPONENTS ARE TO BE IDENTIFIED BY THE FOLLOWING COLOR CODE IN ACCORDANCE WITH ASTM C955: ALL STEEL USED SHALL CONFORM TO ASTM A446, WITH A MINIMUM Fy=33 KSI FOR 18 ADN 20 GAGE, AND Fy=50 KSI FOR 12, 14, \$ 16 GAGE MEMBERS. STRUCTURAL MEMBERS SHALL BE ZINC-COATED, MEETING ASTM A525, G60 OR EQUIVALENT. SUBSTITUTES TO DIETRICH PRODUCTS MUST MEET OR EXCEED THE ENGINEERING PROPERTIES OF DIETRICH BRAND PRODUCTS. THIS INCLUDES ALUES FOR GAGE, M (ALLOWABLE), V (ALLOWABLE), E, I, S, AND ALLOWABLE STRESS. LOAD BEARING STUDS SHALL BE INSTALLED SEATED SQUARELY AGAINST WEB (WITHIN $\chi_6$ " OF THE TOP AND BOTTOM TRACK TO ASSURE TRANSFER OF AXIAL LOAD. STUDS SHALL BE PLUMBED, ALIGNED AND SECURED TO THE CONTINUOUS RUNNER TRACKS AT EACH END AND EACH SIDE BEFORE INSTALLATION OF COMPONENTS WHICH INDUCE AXIAL LOAD. REFER TO DIETRICH TECHNICAL INFORMATION: "CURTAIN WALL/LIGHT GAGE STRUCTURAL FRAMING PRODUCTS, RECOMMENDATIONS, DETAILS, SUGGESTED SPECIFICATIONS, ERECTION AND BRACING PROCEDURES. ALL STRUCTURAL MEMBERS SHALL BE DESIGNED IN ACCORDANCE WITH AMERICAN IRON AND STEEL INSTITUTE (AISI) "SPECIFICATION FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS, 1986 EDITION, 1989 ADDENDUM. FILL AND BACKFILL LOCATION UNDER STRUCTURE FOUNDATIONS TOP 2 FEET UNDER PAVEMENT BELOW TOP 2 FEET UNDER PAVEMENT TRENCHES THROUGH UNPAVED AREAS EMBANKMENTS PIPE BEDDING ALL FOOTINGS SHALL EXTEND A MINIMUM OF 4'-6" BELOW EXTERIOR FINISHED GRADE, OR BE DOWELED TO LEDGE CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER IF LEDGE IS ENCOUNTERED TO DETERMINE PINNING REQUIREMENTS. FIELD DENSITY TESTS: ASTMD 1556 (SAND CONE), ASTMD2167 (RUBBER BALLOON), OR ASTMD2922 (NUCLEAR METHODS). DEGREE OF COMPACTION: COMPACT TO THE FOLLOWING MINIMUM DENSITIES: REMOVE ALL TOPSOIL AND UNCONTROLLED FILL FOR THE AREAS RECEIVING BUILDING FOUNDATIONS. I.I ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" I.2 ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" I.3 CRSI "CONCRETE REINFORCING STEEL INSTITUTE, MANUAL OF STANDARD PRACTICE" COMPLY WITH THE FOLLOWING LATEST EDITIONS AND CURRENT AMENDMENTS: CONTRACTOR IS REQUIRED TO CONFORM TO OSHA (29 PART 1926.650-652) SUBPART P "CONSTRUCTIO STANDARD FOR EXCAVATIONS". EARTHWORK NOTES AXIMUM DENSITY: ASTMD1557, MODIFIED. INTAIN THE INTEGRITY OF NATURAL SOILS AND CONTROLLED RUCTURAL FILLS DURING CONSTRUCTION. PROTECT OTING AND STRUCTURE SUBGRADES AGAINST FREEZING D EXCESSIVE WETTING. REMOVE AND REFILL FROZEN BGRADES, MOISTURE CONDITION, OR REPLACE EXCESSIVELY I SUBGRADE MATERIALS. MPACT CONTROLLED STRUCTURAL FILLS IN CORDANCE WITH THE FOLLOWING SCHEDULE AND IM DI557. USE ONLY HAND-OPERATED EQUIPMENT JACENT TO WALLS. FILL BOTH SIDES OF WALLS TO JAL ELEVATIONS BEFORE COMPACTING. OF ROLL SUBGRADE PRIOR TO SLAB CONSTRUCTION. VIDE STRUCTURAL FILL MEETING THE GRADATION SIFIED HEREIN FOR FILL MATERIALS BELOW THE SLAB, MUM PERCENT PASSING 200 SIEVE = 5%. CONCRETE NOTES (CONT). 5.1 EXTERIOR SLABS: -CEMENT SHALL BE ASTM 150, TYPE II PORTLAND CEMENT -28 DAY COMPRESSIVE STRENGTH: 4000 PSI -MAX. AGG. SIZE: ¾" -AIR CONTENT: 6% + 1% BY VOLUME -MAX WATER-CEMENT RATIO: 0.45 -AGGREGATE SHALL CONFORM TO ASTM C33 5.3.1 HIGH RANGE WATER REDUCERS (SUPER PLASYCIZERS): EQUAL TO DARACEM 100 BY W.R. GRACE \$ CO., ASTM C-494. 5.3.2 ACCELERATORS: EQUAL TO DARASET BY W.R. GRACE \$ CO., ASTM C-404 TYPE C OR E. 5.3.3 AIR ENTRANCING: EQUAL TO "DARAVAIR" BY W.R. GRACE \$ CO., ASTM C-260 AND ARMY CORPS CRD-C-13. EACH COMPOSITE SAMPLE, BUT NOT LESS THAN ONE TEST FOR EACH COMPOSITE SAMPLE, BUT NOT LESS THAN ONE TEST FOR EACH COMPOSITE SAMPLE, BUT NOT LESS THAN ONE TEST FOR EACH CONCRETE MIX. PREFORM ADDITIONAL TESTS WHEN CONCRETE CONSISTENCY APPEARS TO CHANGE. AIR CONTENT: ASTM C 231, PRESSURE METHOD, FOR NORMAL-WEIGHT CONCRETE; ASTM C 173, VOLUMETRIC METHOD, FOR STRUCTURAL LIGHTWEIGHT CONCRETE; ONE TEST FOR EACH COMPOSITE SAMPLE, BUT NOT LESS THAN ONE TEST FOR EACH COMPOSITE SAMPLE, BUT NOT LESS THAN ONE TEST FOR EACH COMPOSITE SAMPLE, BUT NOT LESS THAN ONE TEST FOR EACH COMPOSITE SAMPLE. COMPRESSION TEST SPECIMENS: ASTM C 31/C 3 IM; CAST AND ABOVE, AND ONE TEST FOR EACH COMPOSITE SAMPLE. COMPRESSION TEST SPECIMENS: ASTM C 31/C 3 IM; CAST AND LABORATORY CURE ONE SET OF FOUR STANDARD CYLINDER SPECIMENS FOR EACH COMPOSITE SAMPLE. COMPRESSIVE-STRENGTH TESTS: ASTM C 39; TEST TWO LABORATORY-CURED SPECIMENS AT 7 DAYS AND TWO AT 28 DAYS. ENGITH OF EACH CONCRETE MIX WILL BE SATISFACTORY IF EVERY RAGE OF ANY THREE CONSECUTIVE COMPRESSIVE-STRENGTH AND COMPRESSIVE-STRENGTH HAD SOO PSI. CCK SLAB FOR COMPLIANCE WITH SPECIFIED FLOOR FLATNESS ERANCES IN ACCORDANCE WITH ASTM E 1155. CCK SLAB FOR COMPLIANCE WITH SPECIFIED FLOOR FLATNESS ERANCES IN ACCORDANCE WITH ASTM E 1155. CCK SLAB FOR COMPRESSIVE-STRENGTH TEST OF DIGINEER, OF TAXING TO PSI. CCK SLAB FOR COMPRESSIVE-STRENGTH TESTING AND INSPECTING NOT INSPECTING AND INSPECTING AND INSPECTING AND ANSPECSIVE STRENGTH AT 28 DAYS. CONCRETE MIX PROPORTIONS OF ANTENSING DESTRUCTIVE DEVICE MAY BE PERMITTED BY ENGINEER BUT LINGT BUSING AND SPECTING AND ANSPECSIVE STRENGTH AT 28 DAYS. CONCRETE MIX PROPORTIONS OF ANTENSIVE BREAKING STRENGTH, AND TYPE OF ANTENSIVE DASS OF STRENGTH, AND TYPE OF ANTENSIVE DASS FOR APPROVAL OR REJECTION OF CORE TESTING BUT LINGT BAYS. SONOSCOPE, OR NORESTS WILL BE REQUIRED. OR EACH TYPE OF MANUFACTURED MATERIAL AND D. R. EACH CONCRETE MIX. INCLUDE ALTERNATE MIX ARACTERISTICS OF MATERIALS, PROJECT HER, TEST RESULTS, OR OTHER CIRCUMSTANCES JENTS CONCRETE NOTES (CONT). 5.9 EMBEDDED ITEMS: 6.2 DEVELOPMENT AND SPLICING: 5.11.1 6 mil. POLY AT BUILDING FOOTPRINT ONLY 5.8.1 A NON-EXTENDING AND RESILIENT BITUMINOUS TYPE JOINT FILLER, ½" THICK. PROVIDE DEVELOPMENT AND TENSION LAP SPLICE LENGTHS IN ACCORDANCE WITH THE FOLLOWING, UNLESS NOTED OTHERWISE ON PLANS: COMPLY WITH REQUIREMENTS OF CRSI, LATEST EDITION. 6.1.1 MINIMUM CONCRETE COVER: 3" FOR CONCRETE CAST AGAINST SOIL; 2" FOR OTHER CONCRETE, UNLESS OTHERWISE SHOWN. ISOLATION JOINTS: PROVIDE IN SLABS-ON-GRADE IT POINTS OF CONTACT BETWEEN SLABS-ON-GRADE AND VERTICAL SURFACES, SUCH AS FOUNDATION VALLS, GRADE BEAMS, COLUMN PEDESTALS, AND USEWHERE AS NECESSARY. CONTRACTION (CONTROL) JOINT: PROVIDE IN BLABS-ON-GRADE BY SAW CUTTING TO A DEPTH OF 1/4 HE SLAB THICKNESS. PROVIDE A ONE PART LASTOMERIC JOINT SEALANT TO JOINT GROOVE, A MINIMUM OF 60 DAYS AFTER SLAB PLACEMENT INLESS OTHERWISE APPROVED. SEE PLAN FOR OINT LAYOUT. CONCRETE NOTES HEN AIR TEMPERATURE HAS FALLEN TO OR IS "ECTED TO FALL BELOW 40 DEG F, UNIFORMLY "ECTED TO FALL BELOW 40 DEG F, UNIFORMLY "ETED TO FALL BELOW 40 DEG F, UNIFORMLY "AT WATER AND AGGREGATES BEFORE MIXING "OBTAIN A CONCRETE MIXTURE TEMPERATURE "NOT LESS THAN 50 DEG F AND NOT MORE "AN 80 DEG F AT POINT OF PLACEMENT. "NOT USE FROZEN MATERIALS OR MATERIALS "NITAINING ICE OR SNOW. DO NOT PLACE "MIXINING ICE OR SNOW. DO NOT PLACE "MIXINING ICE OR SNOW. DO NOT PLACE "NOT USE FROZEN SUBGRADE OR ON "BGRADE CONTAINING FROZEN MATERIALS." "NOT USE CALCIUM CHLORIDE, SALT, OR "HER MATERIALS CONTAINING ANTIFREEZE "ENTS OR CHEMICAL ACCELERATORS, UNLESS "HERWISE SPECIFIED AND APPROVED IN MIX "SIGNS" WORK FROM PHYSICAL ED STRENGTH THAT COULD 5T, FREEZING ACTIONS, OR (CONT).

SHEET NO:	PROJECT NUMBER:	FILE #:	DRAWN BY: RSC	DESIGN BY: ASW	SCALE : AS NOTED	DATE : 6-15-15



CT: ALLAGASH BOILER ROOM EXTENSION INDUSTRIAL WAY, PORTLAND, MAINE FOR: ALLAGASH BREWING CO.

NOTES
ISSUED FOR PERMITTING

SHEET TITLE:



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